ABSTRACT of Paper to be presented

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Observations of Jupiter's Synchrotron Radiation: An Update on Long- and Short-term Variations

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New results on long- and short-term variations are reported from the NASA-JPL observing program that monitors the synchrotron radio emission from Jupiter's inner radiation belts. These observations are made with NASA Deep Space Network antennas at 2295 MHz as part of a radio astronomy monitoring program begun in 1971. Results from this program illustrating the nature of the long-term variability of the synchrotron radiation will be discussed. Systematic changes in Jupiter's System III rotational beaming curve as a function of De, the declination of the Earth, will be described and updated.

During the period surrounding the Comet SL-9 impacts, the observational schedule was intensified and the precision was increased with the application of new observing procedures. Although the number of days per month scheduled for these observations was reduced six months after the impacts, systematic observations were scheduled at two-to-three week intervals throughout 1995 and 1996. At least one sudden flux increase of approximately ten percent appears to have occurred near the end of August 1995.